



COVID-19

To maximize protection from the [Delta variant](#) and prevent possibly spreading it to others, get vaccinated as soon as you can and wear a mask indoors in public if you are in [an area of substantial or high transmission](#).

COVID-19 Vaccines While Pregnant or Breastfeeding

Updated Aug. 11, 2021

What You Need to Know

- COVID-19 vaccination is recommended for all people 12 years and older, including people who are pregnant, breastfeeding, trying to get pregnant now, or might become pregnant in the future.
- Evidence about the safety and effectiveness of COVID-19 vaccination during pregnancy has been growing. These data suggest that the benefits of receiving a COVID-19 vaccine outweigh any known or potential risks of vaccination during pregnancy.
- There is currently no evidence that any vaccines, including COVID-19 vaccines, cause fertility problems in women or men.
- Pregnant and recently pregnant people are more likely to get severely ill with COVID-19 compared with non-pregnant people.
- Getting a COVID-19 vaccine can protect you from severe illness from COVID-19.

Increased Risk for Severe Illness from COVID-19

Although the overall risk of severe illness is low, [pregnant and recently pregnant people](#) are at an increased risk for severe illness from COVID-19 when compared with non-pregnant people. Severe illness includes illness that requires hospitalization, intensive care, need for a ventilator or special equipment to breathe, or illness that results in death. Additionally, pregnant people with COVID-19 are at increased risk of preterm birth and might be at increased risk of other adverse pregnancy outcomes, compared with pregnant women without COVID-19.

Safety and Effectiveness of COVID-19 Vaccination during Pregnancy

Evidence about the safety and effectiveness of COVID-19 vaccination during pregnancy, although limited, has been growing. These data suggest that the benefits of receiving a COVID-19 vaccine outweigh any known or potential risks of vaccination during pregnancy.

- **No safety concerns were found in animal studies:** Studies in animals receiving a [Moderna](#), [Pfizer-BioNTech](#), or [Johnson & Johnson \(J&J\)/Janssen](#) COVID-19 vaccine before or during pregnancy found no safety concerns in pregnant animals or their babies.
- **No adverse pregnancy-related outcomes occurred in previous clinical trials that used the same vaccine platform**

as the J&J/Janssen COVID-19 vaccine: Vaccines that use the same viral vector have been given to pregnant people in all trimesters of pregnancy, including in a large-scale Ebola vaccination trial. No adverse pregnancy-related outcomes, including adverse outcomes affecting the baby, were associated with vaccination in these trials. Learn more about [how viral vector vaccines work](#).

COVID-19 vaccines do not cause infection, including in pregnant people or their babies: None of the COVID-19 vaccines contain the live virus that causes COVID-19 so a COVID-19 vaccine cannot make anyone sick with COVID-19, including pregnant people or their babies.



Early data on the safety of receiving an mRNA COVID-19 vaccine (Moderna or Pfizer-BioNTech) during pregnancy are reassuring:

CDC released the first U.S. data on the safety of receiving an mRNA COVID-19 vaccine during pregnancy. The report analyzed data from three [safety monitoring systems](#) in place to gather information about COVID-19 vaccination during pregnancy. These early data did not find any safety concerns for pregnant people who were vaccinated or their babies.¹

Another report looked at pregnant people enrolled in the [v-safe pregnancy registry](#) who were vaccinated before 20 weeks of pregnancy. Scientists did not find an increased risk for miscarriage among people who received an mRNA COVID-19 vaccine during pregnancy.²

Many pregnancies reported in these safety monitoring systems are ongoing. CDC will continue to follow people vaccinated during all trimesters of pregnancy to better understand effects on pregnancy and babies.

Early data suggest receiving an mRNA COVID-19 vaccine during pregnancy reduces the risk for infection: A recent study from Israel compared pregnant people who received an mRNA COVID-19 vaccine with those who did not. Scientists found that vaccination lowered the risk of infection from the virus that causes COVID-19.³

Vaccination of pregnant people builds antibodies that might protect their baby: When pregnant people receive an mRNA COVID-19 vaccine during pregnancy, their bodies build antibodies against COVID-19, similar to non-pregnant people. Antibodies made after a pregnant person received an mRNA COVID-19 vaccine were found in umbilical cord blood. This means COVID-19 vaccination during pregnancy might help protect babies against COVID-19. More data are needed to determine how these antibodies, similar to those produced with other vaccines, may provide protection to the baby.⁴

Additional clinical trials that study the safety of COVID-19 vaccines and how well they work in pregnant people are underway or planned. Vaccine manufacturers are also collecting and reviewing data from people in the completed clinical trials who received a vaccine and became pregnant.

If you are pregnant and receive a COVID-19 vaccine, consider participating in the v-safe pregnancy registry

If you are pregnant and have received a COVID-19 vaccine, we encourage you to enroll in [v-safe](#). V-safe is CDC's smartphone-based tool that uses text messaging and web surveys to provide personalized health check-ins after vaccination. A [v-safe pregnancy registry](#) has been established to gather information on the health of pregnant people who have received a COVID-19 vaccine. If people enrolled in v-safe report that they were pregnant at the time of vaccination or after vaccination, the registry staff might contact them to learn more. Participation is **voluntary**, and participants may opt out at any time.

People who are Pregnant


COVID-19 vaccination is recommended for all people 12 years and older, including people who are pregnant. If you are pregnant, you might want to have a conversation with your healthcare provider about COVID-19 vaccination. While such a conversation might be helpful, it is not required before vaccination. You can receive a COVID-19 vaccine without any additional documentation from your healthcare provider.

CDC recommendations align with those from professional medical organizations serving people who are pregnant, including the [American College of Obstetricians and Gynecologists](#) [↗](#) and the [Society for Maternal Fetal Medicine](#) [↗](#).

If you got pregnant after receiving your first shot of a COVID-19 vaccine that requires two doses (i.e., Pfizer-BioNTech COVID-19 vaccine or Moderna COVID-19 vaccine), you should get your second shot to get as much protection as possible. If you experience fever following vaccination, you should take acetaminophen (Tylenol®) because fever—for any reason—has been associated with adverse pregnancy outcomes.

If you are pregnant and have questions about COVID-19 vaccine

If you would like to speak to someone about COVID-19 vaccination during pregnancy, you can contact MotherToBaby. MotherToBaby experts are available to answer questions in English or Spanish by phone or chat. The free and confidential service is available Monday–Friday 8am–5pm (local time). To reach MotherToBaby:

- Call 1-866-626-6847
- Chat live or send an email [MotherToBaby](#) 



People who are Breastfeeding

COVID-19 vaccination is recommended for all people 12 years and older, including people who are breastfeeding. Clinical trials for the COVID-19 vaccines currently used in the United States did not include people who are breastfeeding. Because the vaccines have not been studied in people who are breastfeeding, there are limited data available on the:

Safety of COVID-19 vaccines in people who are breastfeeding

Effects of vaccination on the breastfed baby

Effects on milk production or excretion

COVID-19 vaccines cannot cause infection in anyone, including the mother or the baby, and the vaccines are effective at preventing COVID-19 in people who are breastfeeding. Recent reports have shown that breastfeeding people who have received mRNA COVID-19 vaccines have antibodies in their breastmilk, which could help protect their babies. More data are needed to determine what protection these antibodies may provide to the baby.^{4,7}

Prevent the Spread of COVID-19 after Vaccination: Follow Recommendations

After you are fully vaccinated, you may be able to participate in many of the activities that you did before the pandemic. Learn more about what you can do [when you have been fully vaccinated](#).

If you have a condition or are taking medications that weaken your immune system, you may NOT be fully protected even if you are fully vaccinated. Talk to your healthcare provider. Even after vaccination, you may need to continue taking all [precautions](#).

Vaccine Side Effects

Side effects can occur after receiving any of the available COVID-19 vaccines, especially after the second dose for vaccines that require two doses. Pregnant people have not reported different side effects from non-pregnant people after vaccination with mRNA COVID-19 vaccines (Moderna and Pfizer-BioNTech vaccines). If you experience fever following vaccination you should take acetaminophen (Tylenol®) because fever—for any reason—has been associated with adverse pregnancy outcomes. Learn more at [What to Expect after Getting a COVID-19 Vaccine](#).

Although rare, some people have had allergic reactions after receiving a COVID-19 vaccine. Talk with your healthcare provider if you have a history of allergic reaction to any other vaccine or injectable therapy (intramuscular, intravenous, or subcutaneous).

Key considerations you can discuss with your healthcare provider include:

- The unknown risks of developing a severe allergic reaction
- The benefits of vaccination

If you have an allergic reaction after receiving a COVID-19 vaccine during pregnancy, you can receive treatment for it.

People Who Would Like to Have a Baby

COVID-19 vaccination is recommended for everyone 12 years of age and older, including people who are [trying to get pregnant now or might become pregnant in the future](#), as well as their partners.

Johnson & Johnson's Janssen (J&J/Janssen) COVID-19 Vaccine: Women younger than 50 years old should especially be aware of the rare risk of blood clots with low platelets after vaccination. There are other COVID-19 vaccines available for which this risk has not been seen. If you received a J&J/Janssen COVID-19 Vaccine, [here is what you need to know](#). Read the [CDC/FDA statement](#).





Find a COVID-19 Vaccine: Search [vaccines.gov](#), text your ZIP code to 438829, or call 1-800-232-0233 to find locations near you.

Related Pages

- › [Allergic Reactions](#)
- › [People Who Would Like to Have a Baby](#)



For Healthcare and Public Health


- [Considerations for the Use of COVID-19 Vaccines Currently Available in the U.S.](#)
- [Management of Anaphylaxis after COVID-19 Vaccination](#)
- [ACOG Recommendations for Vaccinating Pregnant People](#)  [37 KB, 1 page] 
- [ACOG Practice Advisory: Vaccinating Pregnant and Lactating Patients Against COVID-19](#) 
- [COVID-19 Clinical and Professional Resources](#)
- [Protect yourself and your baby from COVID-19](#)  [550 KB, 1 Page]

Related Research and More Information

Research

[Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons](#) 

[The Advisory Committee on Immunization Practices' Interim Recommendation for Use of Janssen COVID-19 Vaccine](#)

[Risk factors for illness severity among pregnant women with confirmed SARS-CoV-2 infection – Surveillance for Emerging Threats to Mothers and Babies Network, 20 state, local, and territorial health departments, March 29, 2020 -January 8, 2021](#)  .




[The Advisory Committee on Immunization Practices' Interim Recommendation for Use of Pfizer-BioNTech COVID-19 Vaccine](#)

[The Advisory Committee on Immunization Practices' Updated Interim Recommendation for Allocation of COVID-19 Vaccine](#)

More Information

[Mother to Baby: Information for people who are pregnant of breastfeeding](#) 

References

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3. Goldshtein I, Nevo D, Steinberg DM, et al. Association Between BNT162b2 Vaccination and Incidence of SARS-CoV-2 Infection in Pregnant Women. *JAMA*. Published online July 12, 2021. doi:10.1001/jama.2021.11035
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6. Kelly JC, Carter EB, Raghuraman N, et al. Anti-severe acute respiratory syndrome coronavirus 2 antibodies induced in breast milk after Pfizer-BioNTech/BNT162b2 vaccination. *Am J Obstet Gynecol*. 2021;225(1):101-103. <https://doi.org/10.1016/j.ajog.2021.03.031> 
7. Jakuszko K, Kościelska-Kasprzak K, Żabińska M, et al. Immune Response to Vaccination against COVID-19 in Breastfeeding Health Workers. *Vaccines*. 2021; 9(6):663. <https://doi.org/10.3390/vaccines9060663> 

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